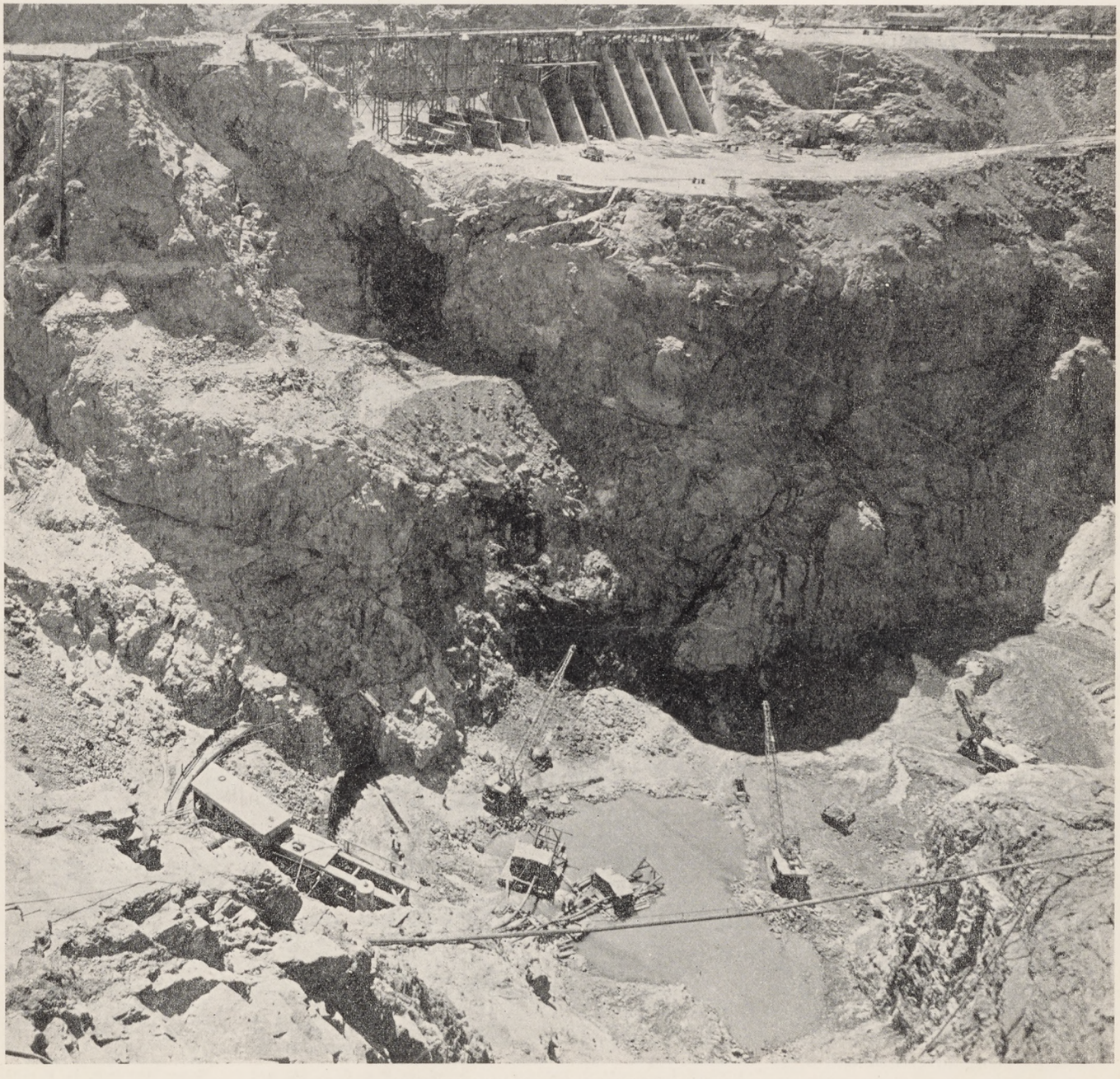
• COLORADO RIVER •

AQUEDUCT NEWS

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Vol. IV JULY 25, 1937 No. 14



EXCAVATION FOR PARKER DAM

Story, page 6.

• COLORADO RIVER •
AQUEDUCT NEWS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

306 WEST THIRD ST.
LOS ANGELES, CALIFORNIA

Published twice monthly in the interest of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.

Vol. IV July 25, 1937 No. 14

Bids Called For On New Distribution Cross-Feeder

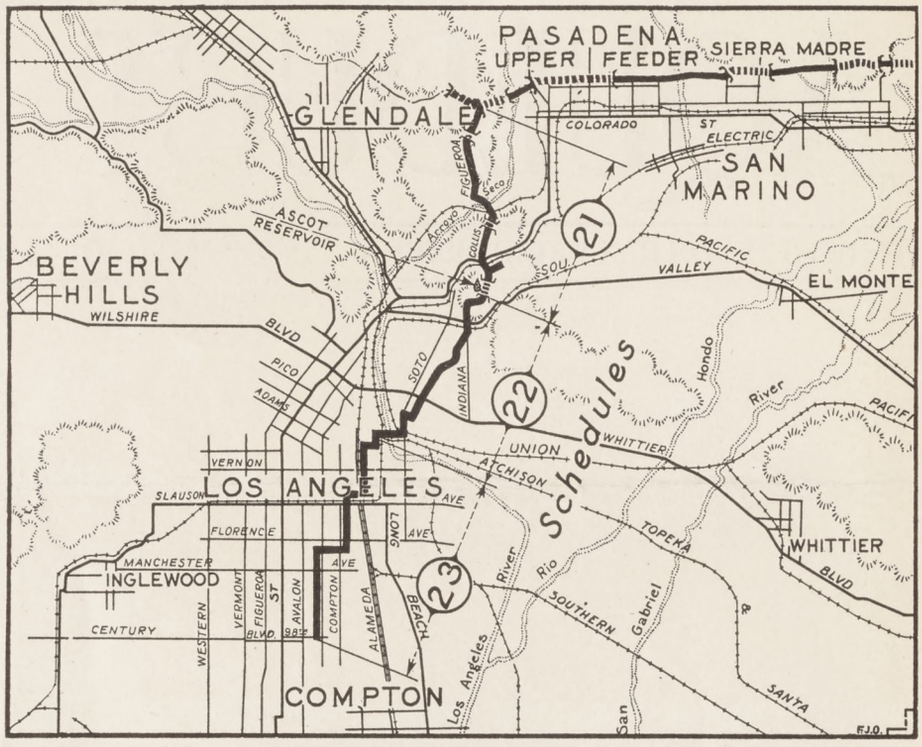
Advancing into and through the city of Los Angeles, construction work on the aqueduct will soon be extended by an additional 17.4 miles. An official notice inviting bids has been issued for the construction of distribution schedules 21, 22, and 23, to be built under Specifications No. 225, comprising part of the western cross-feeder of the distributing system. Bids are to be opened on September 1, 1937.

Connecting to the present upper feeder in Eagle Rock Canyon, between San Rafael tunnels Nos. 1 and 2, the new line will extend in a southwesterly direction to 98th Street and Wadsworth Avenue (three blocks east of Avalon Boulevard) in Los Angeles. This feeder will serve Los Angeles, and the extension of this line south of 98th Street will serve the District cities of Compton, Torrance, and Long Beach.

Bidders' proposals will be received under schedules embodying four alternative types of precast concrete and welded steel pipe lines. Under these various types of construction, the pipe line will vary from 50 inches to 57 inches in diameter — depending upon the kind of pipe used, and its location in the feeder. Schedule 21 is 5.5 miles long, schedule 22 is 5.4 miles in length, and schedule 23 has a length of 6.5 miles.

Included in the construction also will be three tunnels having a total length of 2,481 feet. Water will be carried through these tunnels in pipe lines, rather than flowing directly in the tunnels themselves. These structures will be known as the Rockdale, Oakhill, and Ascot tunnels.

The work being advertised will bring a total of 322 miles of the 392-mile aqueduct system under construction.



This map shows the location of the 17.4 miles of new distributing lines to be constructed under Specifications No. 225. Bids will be opened on September 1, 1937.

Directory

BOARD OF DIRECTORS

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Secy. to Gen. Mgr.....Elisabeth von Hagen

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Divisions 2 & 3.....John Stearns
Division 4.....O. J. Schieber
Divisions 5 & 6.....J. B. Bond
Distribution.....R. B. Diemer
Transmission.....Robert N. Allen

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Intake and Gene.....T. T. Walsh
Iron Mt.....B. H. Martin
Eagle Mt. and Hayfield.....R. C. Booth

SUPERINTENDENTS

(Main Aqueduct Tunnels)

East Eagle Mt. Tunnel and West Eagle Mt. Tunnel, east portion, Broderick & Gordon; John Will, Gen. Supt.

Coachella Tunnels, Ed. Noon, Supt.; J. C. Fischer, Gen. Foreman.

San Jacinto Tunnel, District Force Acct., B. C. Leadbetter, Gen. Supt.; S. J. Shrode, John Austin and C. E. Sides, Tunnel Supts.; Chas. F. Thomas, Jr., Supt.; F. A. Backman, Gen. Foreman.

(Distribution Tunnels)

Monrovia Tunnels Nos. 1, 2 and 3, West Construction Co., H. E. Carleton, Gen. Supt.; Peter Brisbois and Luther Dennis, Tunnel Supts.; E. M. Penn, Concrete Supt.

San Rafael Tunnels Nos. 1 and 2, and Monrovia Tunnel No. 4, L. E. Dixon Co., Bent Bros., Inc., and Johnson, Inc.; S. D. Hackley and W. N. Evans, Supts.

(Canal, Siphon, Conduit)

Schedules Nos. 1, 1A, 1B, 10, 10A, 10B, 11, 11A, 11B, 11C, 13, 13A, and 13B, Aqueduct Construction Co., S. T. Corfield, Gen. Supt.; Charles Harlowe, Jr., Excav. Supt.

Schedules Nos. 2, 2A, 2B, 3, 3A, 3B, 7, and 7A, Barrett & Hilp and Macco Corp.; H. W. McKinley, Supt.

Schedules Nos. 6, 8, 8A, and 8B, Clyde W. Wood and M. J. Bevanda, A. F. Weesner, Gen. Supt.

Schedules Nos. 9, 9A, 9B, and 9C, The Utah Construction Co.; Gen Arp, Gen. Supt.

Schedules Nos. 12 and 12A, Three Companies, Inc., John Will, Supt.

Schedules Nos. 14, 15, and 16, Thompson - Starrett Co., Inc., Rodney Smith, Gen. Supt.; William Hayes, Excav. Supt.

Schedules Nos. 18, 19, and 20, J. F. Shea Co., Inc., J. G. Shea, Gen. Mgr.; H. F. Rennebohm, Supt.

(Distribution Pipe Line)

Schedules No. 1P and 3P, American Concrete & Steel Pipe Co., Wm. A. Whiting, Gen. Supt.; D. H. Rankin, Plant Supt. and Const. Supt.

Schedules 6P and 7P, J. F. Shea Co., Inc., J. G. Shea, Gen. Mgr.; Ed. H. Shea, Gen. Supt.

Schedule 10P, United Concrete Pipe Corp., John Huber, Plant Supt.; Roy Richards, Const. Supt.

Schedules 2B and 2S, Western Pipe & Steel Co., L. L. White, Supt.

Schedules 8C, 9C, 12C, Basich Bros.; P. N. Hartzell, Supt.

(Dams)

Cajalco dam, The Griffith Co., Fronz Fohl, Gen. Supt.

Parker Dam, J. F. Shea Co., Frank Crowe, Gen. Supt., E. A. Moritz, Constr. Eng., U.S.B.R.

Gene Wash dam, Copper Basin dam, J. F. Shea Co., Frank Crowe, Gen. Supt.

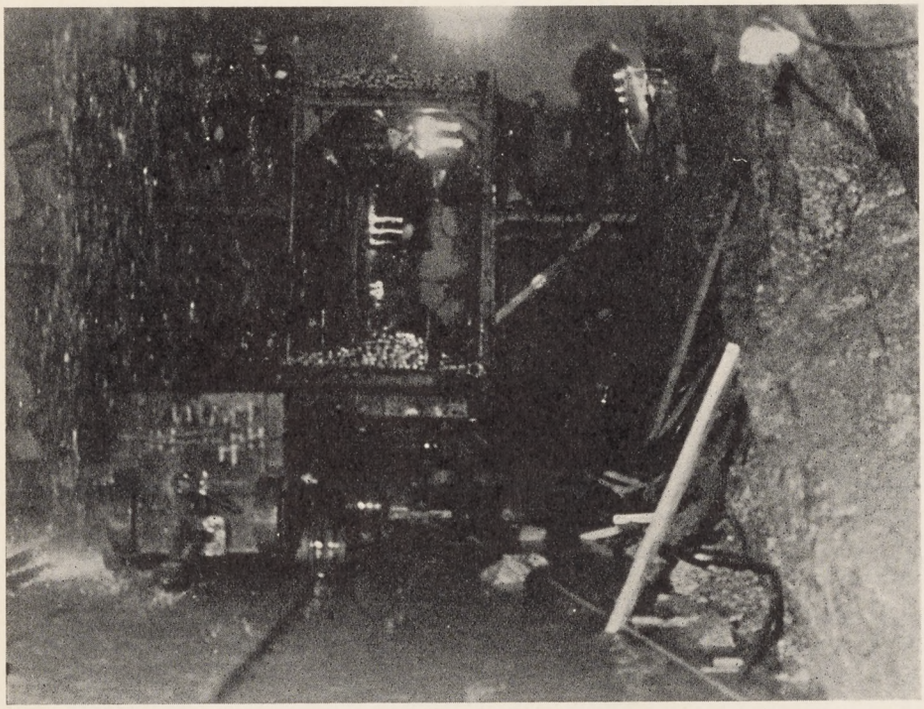
(Pumping Plants)

Intake and Gene, Winston Bros. and Crowell, R. A. Crowell, Supt.; F. T. Hillman Engr.

Iron Mountain, Wood and Bevanda; Grant Miner, Supt.

Eagle Mountain, L. E. Dixon Co.; F. H. Strohecker, Supt.

Hayfield, Dixon and Case; Crawford Strohacker, Supt.



A drill crew at work in the Cabazon face in wet going. In June these crews established a new San Jacinto record.

Cabazon Crews Set New Driving Record

Excellent excavation progress is being recorded in the Cabazon main heading of the San Jacinto tunnel. During the month of June, the Cabazoneers, under the direction of Tunnel Superintendent C. E. "Tim" Sides, established a new record for excavation in the 13-mile tunnel. In the thirty days of that month the main heading was advanced 806 feet, exceeding by 39 feet the previous San Jacinto record made in the same heading in June, 1934.

Based on the fast progress being made during the present month, the June record will again be equalled or exceeded during July. During June, the crews averaged 8.96 feet per shift. During the first 21 days of July, these crews had advanced 567 feet, one day being lost because of the July 4 shut-down. The average progress per shift for this month therefore amounts to 9.45 feet.

At the end of the week of July 17, 1937, the entire San Jacinto tunnel was 68.8 per cent excavated. In terms of footage this amounted to 47,336 feet excavated to that date, with 21,513 feet, or just a little over four miles, remaining to be driven.

The ground in the Cabazon heading has been good during recent weeks with the last report reading "dry and tightly-jointed granodiorite, no support required". The going has been tougher in the Potrero side of the tunnel but excavation is being pushed ahead nevertheless. On July 19, the full-sized sections were holed through between crosscuts Nos. 1 and 2, making the main heading 7,500 feet east of the Potrero shaft.

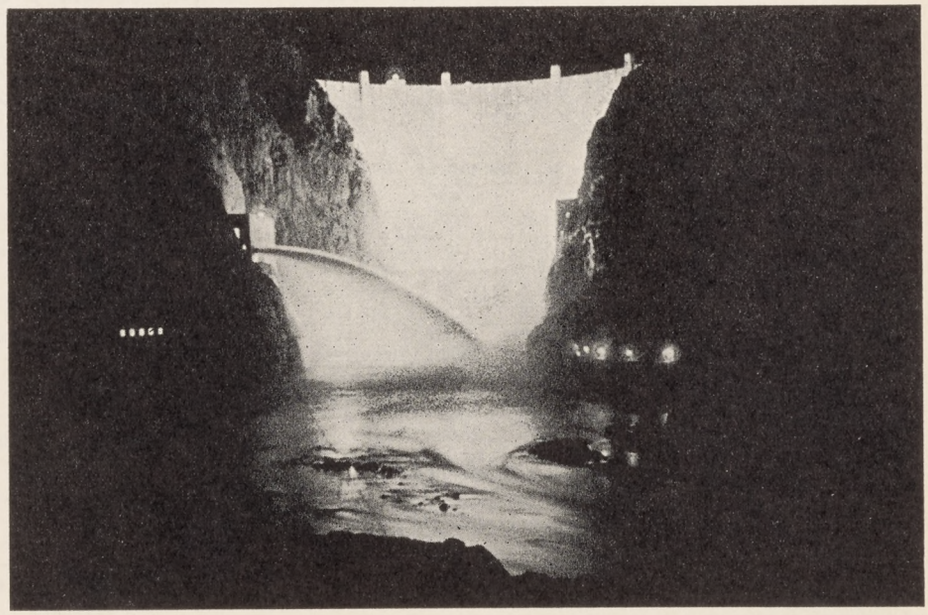
EQUIPMENT AWARDS MADE FOR PUMPING PLANTS

During its meeting of July 16, 1937, the Board of Directors awarded contracts for the furnishing of 107,000 pounds of copper bars and tubes, forty-five service pumps of various types, and five electrically operated welded steel head gates—all of this equipment being required for the five aqueduct pumping plants.

The Union Hardware and Metal Company was awarded a contract for furnishing the copper required under items 1 to 19, inclusive, of Specifications No. 223, based on that company's low bid of $19,443. Anaconda Wire and Cable Co. of California was low bidder and was awarded a contract for furnishing material under item 20 of the same specifications at a price of $4,825.

The various types of service pumps will be used for cooling systems, auxiliary sump pumps, fire protection, and domestic water supply. Furnished under Specifications No. 222, these pumps will be supplied in four schedules. Based on their low bids, the following companies were awarded contracts for the pumps: Schedule 1, Peerless Pump Division, Food Machinery Corp., $30,273; Schedule 2, Byron-Jackson Co., $6,078; Schedule 3, Buffalo Pumps, Inc., $2,225; Schedule 4, Victor Equipment Co., $872.

Commercial Iron Works, Portland, Ore., will furnish the five pumping plant delivery line gates on the basis of its low bid of $45,261.



Bill Aultman of the Hydrographic Section took this night-time picture of the flood lighted downstream face of Boulder Dam. Bill states than 9,000 electric lights are required to provide this illumination.

TUNNELS

June 16 to July 15, 1937

TUNNEL EXCAVATION (MILES)

	Completed	Remaining
Aqueduct	88.02	4.09
Distribution	16.20	0
Total	104.22	4.09

TUNNEL LINING (MILES)

	Completed	Remaining
Aqueduct*	83.41	8.70
Distribution	10.96	5.19
Total	94.37	13.89

*Arch considered to equal 0.9 completed section.

AQUEDUCT

CONTRACTOR	TUNNEL	LENGTH IN FEET	EXCAVATION IN FEET					LINING IN FEET					
			NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAINING	ARCH OR INVERT	NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAINING
BRODERICK & GORDON	EAST EAGLE MT.	9,440		Completed		9,440	0	Arch			0	9,440	0
								Invert	36	262.2	9,440	9,440	0
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	SAN JACINTO	(68,849)			(1,046)	(47,258)	(21,591)				(368)	(22,969)	(45,880)
	Cabazon Shaft to East Portal	8,880		Completed		8,880	0	Arch	0	0	0	8,484	396
	Cabazon to Lawrence	26,817	87	9.5	829	15,438	11,379	Invert	19	193.6	3,679	3,809	5,071
	Cabazon Pioneer	18,119	87	9.1	789	6,998	11,121						
	Lawrence Adit	5,651	87	4.3	378	4,744	907						
	Potrero Pioneer	15,195	87	2.0	172	5,372	9,823						
	Potrero to Lawrence	17,670	87	2.5	217	7,458	10,212						
	Potrero Shaft to West Portal	15,482		Completed		15,482	0	Arch	0	0	0	14,953	529
								Invert	0	0	0	14,953	529
	TOTALS Ft.	78,289	174	6.0	1,046	56,698	21,591	Arch	0	0	0	32,877	45,412
	Miles	(14.83)			(0.20)	(10.74)	(4.09)	Invert	55	238.5	13,119	28,202	50,087

DISTRIBUTION

GRIFFITH CO.	CAJALCO OUTLET	2,368		Completed		2,368	0		60	9.4	563	1,557	791
WEST CONSTRUCTION CO.	MONROVIA NO. 1 (FromW.P.)	7,868		Completed		7,868	0			Completed		7,796	0
	MONROVIA NO. 2 (FromJct.1)	940		Completed		940	0			Completed		856	0
	MONROVIA NO. 3	(32,105)		Completed		(32,105)	(0)						
	East from Adit	11,340				11,340	0	Full Sec.			0	11,284	19,175
	West from Adit					5,913		Invert*	51	79.5	4,055	8,175	12,635
	From West Portal	20,765				14,851	0						
DIXON, BENT BROS. & JOHNSON	MONROVIA NO. 4 (FromW.P.)	8,133		Completed		8,133	0		60	19.4	1,162	2,535	5,598
	SAN RAFAEL No.1 (FromW.P.)	4,047		Completed		4,047	0			Completed		4,028	0
	SAN RAFAEL No. 2 (FromE.P.)	5,669		Completed		5,669	0		75	20.5	1,535	3,829	1,832
	TOTALS Ft.	61,130				61,130	0	Full	246	16.5	4,071	33,520	27,396
	Miles	11.58				11.58	0	Section			(0.77)	(6.34)	(5.19)

*Invert considered to equal 0.2 completed section

Miscellaneous Construction

July 4 to July 17, 1937

AQUEDUCT PUMPING PLANTS AND APPURTENANT WORKS

CONTRACTOR	FEATURES	EXCAVATION—Cu. Yds.				CONCRETE—Cu. Yds.				STEEL—Tons			
		Est. Quan.	Period	To Date	%	Est. Quan.	Period	To Date	%	Est. Quan.	Period	To Date	%
WINSTON BROS. CO. & WILLIAM C. CROWELL	Intake Plant	111,342	0	108,995	98	22,729	0	19,156	84	1,673	0	1441.0	86
	Gene Plant	87,244	0	87,244	100	14,770	0	14,257	96	2,002	0	1947.3	97
WOOD AND BEVANDA	Iron Mt. Plant	356.050	0	356,050	100	22,904	0	22,904	100	1,785	0	1782.6	99
L. E. DIXON CO.	Eagle Plant	268,291	0	241,042	90	27,091	760	20,728	76	2,235	24.7	1112.6	50
L. E. Dixon & Case Const. Co.	Hayfield Plant	352,471	0	344,357	98	30,143	339	9,176	30	2,695	16.5	823.5	30
	TOTALS		0	1,137,688			1,099	86,221			41.2	7107.0	

PARKER RESERVOIR—SIX COMPANIES, INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnels—Excav.	3,463 Ft.	0	3,463	100
Diversion Tunnels—Concrete	3,363 Ft.	0	3,363	100
Cofferdams—Excav.	227,582 C.Y.	0	227,582	100
Cofferdams—Fill	464,890 C.Y.	0	464,890	100
Outlet Works—Excav.	220,000 C.Y.	1,000	207,176	94
Outlet Works—Concrete	5,000 C.Y.	340	3,104	62
Dam—Excavation	1,596,400 C.Y.	10,872	1,464,325	92
Dam—Concrete	260,000 C.Y.	0	0	0
Power House—Excav.	75,000 C.Y.	0	36,335	48
Power House—Concrete	14,000 C.Y.	0	0	0

GENE WASH RESERVOIR—J. F. SHEA CO., INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Dam—Excavation	6,500 C.Y.	200	5,200	80
Dam—Concrete	13,365 C.Y.			
Spillway—Excavation	3,300 C.Y.	0	3,000	90
Spillway—Concrete	3,200 C.Y.			
Dike—Excavation	4,600 C.Y.	0	1,400	30
Dike—Fill	10,500 C.Y.			
Dike—Concrete	1,200 C.Y.			

CAJALCO RESERVOIR—GRIFFITH COMPANY

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnel	2,000 Ft.	0	2,000	100
Outlet App. Channel—Exc.	199,190 C.Y.	0	199,190	100
Outlet Tower—Concrete	3,110 C.Y.	90	2,880	93
Dam & Spillway—Exc.	737,000 C.Y.	1,460	558,982	91
Dam—Fill	3,463,300 C.Y.	133,320	8,020,320	58
Dam & Spillway—Concrete	28,000 C.Y.	1,190	11,985	48
Dike—Excavation	13,700 C.Y.	0	13,680	99
Dike—Fill	3,900,000 C.Y.	0	3,855,500	99
Dike—Concrete	44,100 C.Y.	0	41,680	95

BOULDER TRANSMISSION LINE—FRITZ ZIEBARTH

FEATURES	Length-Line Mi.	Period	To Date	Percent
Footings Constructed	237.0	0	237	100
Towers Erected	237.0	0	237	100
Wire Strung	237.0	5.5	236.5	99

COPPER BASIN RESERVOIR—J. F. SHEA CO., INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Dam & Spillway—Exc.	10,000 C.Y.	0	3,000	33
Dam & Spillway—Conc.	14,725 C.Y.			

TION PROGRESS

CANAL, CONDUIT, SIPHON & PIPE LINES

July 4 to July 17, 1937

CANAL, CONDUIT AND SIPHON (MILES)

	Completed	Remaining
Excavation	137.50	8.17
Concrete	136.95	8.72
Back Fill	72.03	8.87

DISTRIBUTION PIPE LINE (MILES)

	Completed	Remaining
Excavation	38.49	7.82
Concrete	37.70	8.61
Back Fill	34.89	11.42

AQUEDUCT

SCHED. NO.	CONTRACTOR	FEATURES	Length In Feet	EXCAVATION—Feet			CONCRETE—Feet			BACKFILL—Feet		
				Period	To Date	Remain'g	Period	To Date	Remain'g	Period	To Date	Remain'g
6	WOOD AND BEVANDA	Siphon	15,521	0	15,521	0	0	15,521	0	0	15,345	0
8	WOOD AND BEVANDA	Canal and Siphons	49,339	0	49,339	0	0	49,339	0	0	7,090	0
12	THREE COMPANIES, INC.	Conduit and Siphons	32,977	0	32,977	0	0	32,977	0	0	31,238	100
14	THOMPSON-STARRETT CO.	Conduit and Siphons	32,366	0	32,366	0	0	32,366	0	0	32,366	0
15		Conduit and Siphons	35,849	0	35,849	0	0	35,849	0	0	35,849	0
16		Conduit and Siphons	19,359	955	2,168	17,191	0	0	19,359	0	0	19,359
18	J. F. SHEA CO., INC.	Conduit and Siphons	27,537	0	27,537	0	0	27,537	0	0	27,327	210
19	J. F. SHEA CO., INC.	Conduit and Siphons	37,364	0	11,453	25,911	0	11,426	25,938	100	11,217	26,147
20		Siphons	18,618	0	18,618	0	0	18,618	0	0	18,618	0
20 A & B	M. W. D.—FORCE ACCT.	Siphons	735	0	705	30	0	0	735	0	0	735
3	WINSTON BROS. CO.	Siphon (Gene Inlet)	1,877	0	1,877	0	0	1,860	17	0	1,478	320
4	& WILLIAM C. CROWELL	Siphon (Copper Basin)	450	0	450	0	0	450	0	0	0	0
	TOTALS		271,992	955	228,860	43,132	0	225,943	46,049	100	180,528	46,871

DISTRIBUTION PIPE LINES

1	AMER. CONC. & STEEL PIPE CO.	Precast Concrete Pipe	12,277	0	0	12,277	0	0	12,277	0	0	12,277
2	WESTERN PIPE & STL. CO.	Welded Steel Pipe	54,530	1,869	48,631	5,899	2,383	45,668	8,862	1,916	35,202	19,328
3	AMER. CONC. & STEEL PIPE CO.	Precast Concrete Pipe	20,124	366	20,124	0	1,856	19,523	601	1,273	18,456	1,668
4			25,867	0	25,867	0	0	25,867	0	0	25,867	0
5			24,892	0	24,892	0	0	24,892	0	0	24,892	0
6	J. F. SHEA CO., Inc.	Precast Concrete Pipe	27,294	0	27,294	0	0	27,294	0	0	25,838	1,456
7			30,044	1,650	16,530	13,514	1,645	16,317	13,727	1,775	15,845	14,199
9	UNITED CONC. PIPE CORP.	Precast Concrete Pipe	8,697	400	400	8,297	359	359	8,338	0	0	8,697
10			10,517	0	10,517	0	0	10,517	0	0	10,450	67
11			4,105	15	4,105	0	426	4,071	34	340	3,140	965
8C-9C-12C	BASICH BROTHERS	Cast-in-Place Conc. Pipe	1,656	143	343	1,313	0	0	1,656	0	0	1,656
	TOTALS		220,003	4,443	178,703	41,300	6,669	174,508	45,495	5,304	159,690	60,313

Completed Features

TUNNELS

	CONTRACTOR	TUNNEL	Length in Miles	Work Started	Work Completed
AQUEDUCT	MORRISON-KNUDSEN CO.	Mecca Pass, No. 1, 2 & 3	1.13	7-17-33	2-10-35
	WEST CONSTRUCTION CO.	Whitewater Nos. 1 & 2	1.94	7-18-33	4-15-35
	SHOFNER & GORDON	Hayfield No. 2	1.03	7-8-33	7-27-35
	HAMILTON & GLEASON	Bernasconi	1.18	4-19-33	11-21-35
	J. F. SHEA CO., INC.	Cottonwood	3.81	6-14-33	12-29-35
	HUNKIN-CONKEY CON. CO.	Hayfield No. 1	1.84	10-21-33	1-9-36
	DIXON & BENT BROS.	W. Eagle—West Portion	2.02	9-8-33	3-12-36
	DRAVO CONTRACTING CO.	Valverde	7.20	6-7-33	10-18-36
	WALSH CONSTRUCTION CO.	Colorado River	1.04	3-2-34	1-29-36
	WALSH CONSTRUCTION CO.	Copper Basin Nos. 1 & 2	2.32	10-4-33	2-20-36
	WALSH CONSTRUCTION CO.	Whipple Mountain	6.11	8-25-33	1-26-37
	UTAH CONSTRUCTION CO.	IronMt.—West Portion	3.07	5-15-33	10-23-36
	WINSTON BROS. CO.	Iron Mt.—East Portion	4.48	8-9-33	10-30-36
	METRO. WATER DIST.	1000 Palms No. 1	3.04	1-25-33	1-7-37
	" " "	1000Palms No. 2	0.73	2-24-33	12-19-35
	" " "	Wide Canyon No. 1	2.71	3-31-33	2-11-37
	" " "	Wide Canyon No. 2	0.16	3-24-33	2-12-37
	" " "	Seven Palms	3.17	4-27-33	2-2-37
	" " "	Long Canyon	2.90	3-6-34	12-31-36
	" " "	Blind Canyon	1.29	3-22-34	12-3-36
	" " "	Morongo No. 1	1.08	4-21-34	1-20-37
	" " "	Morongo No. 2	0.36	12-29-34	1-5-37
	BRODERICK & GORDON	West Eagle Mt.—E. Portion	3.00	2-8-34	5-6-37
	WINSTON BROS.	Coxcomb	3.37	9-15-33	4-26-37
	METRO. WATER DIST.	East Coachella	18.30	1-25-33	5-8-37
		TOTALS	77.28		
DISTRIBUTION	J. F. SHEA CO., INC.	Sierra Madre	1.27	9-1-35	10-31-36
	DIXON, BENT BROS. & JOHNSON	Pasadena Extension	1.05	10-5-35	11-24-36
	DIXON, BENT BROS. & JOHNSON	Pasadena	2.30	2-11-35	4-29-37
		TOTALS	4.62		

CANAL, CONDUIT, SIPHON, AND PIPE LINES

	CONTRACTOR	FEATURE AND NAME OR SCHEDULE	Length in Miles	Work Started	Work Completed
AQUEDUCT	UNITED CONCRETE PIPE CORP.	Little Morongo Siphon	0.13	2-27-34	8-20-34
	METRO. WATER DIS.	Fan Hill Conduit and Siphon	0.32	10-21-33	11-19-34
	MORRISON-KNUDSEN CO.	Sch. No. 18-J, Big Morongo and San Andreas Siphon	1.86	2-12-35	9-16-36
	GRIFFITH COMPANY	Sch. No. 20-C, 21, 22, 23 & 23-A	12.79	1-5-35	10-13-36
	JAHN & BRESSI CONST. CO.	Sch. No. 5, Canal and Siphons	10.15	12-18-34	11-17-36
	JAHN & BRESSI CONST. CO.	Sch. No. 4, Canal and Siphons	10.08	6-6-35	3-18-37
	UTAH CONSTRUCTION CO.	Sch. No. 9, Canal, Conduit & Sip.	8.97	12-12-34	5-15-37
	BARRETT-HILP & MACCO CORP.	Sch. No. 2, 3, 7, Canal, Con. & Sip.	18.71	12-3-34	5-25-37
	METRO. WATER DIST.	Sch. No. 17, Conduit and Siphons	4.16	9-9-35	6-15-37
	AQUEDUCT CONST. CO.	Sch. No. 1, 10, 13	26.99	1-24-35	6-24-37
		TOTALS	94.16		
DISTRIBUTION	UNITED CONCRETE PIPE CORP.	Sch. No. 8P, Precast Concrete Pipe	4.65	2-21-36	3-20-37

Board Indicates Annexation Policy

The City of Inglewood, through its City Council, has officially requested the Board of Directors to indicate the terms and conditions upon which the Metropolitan Water District would consent to the annexation of the City of Inglewood.

In answering the request from Inglewood, the Board stated in part:

"The Metropolitan Water District Act provides that, before any municipality legally may vote upon the proposition of annexing to the District, such municipality shall apply to the Board of Directors of the District for consent to annex. The Act further provides that the Board of Directors may grant or deny such application, and if the application be granted the District at that time will fix the terms and conditions upon which said city may annex. * *

"The thirteen cities, all of which were in the District at the time the aqueduct bond issue was authorized on September 29, 1931, have been guaranteed the delivery of aqueduct water to their city boundaries. It is the policy of the Board of Directors to extend this service to the boundaries of such other cities as may be permitted to annex to the District before or during the period of construction of distributing lines in the general territory of such cities. The policy of the Board does not extend to the construction of laterals to cities or areas which may seek annexation to the District after distributing lines have been fixed or constructed in the general territory of such cities or areas. * *

"Before the Board would be able to give its consent to the City of Inglewood to submit the proposition of annexation, it desires to secure tangible evidence that a substantial number of Inglewood residents favor the annexation of that city to the Metropolitan Water District of Southern California."

THE COVER

The view of the work at Parker Dam shown on this issue of the NEWS vividly illustrates the vast amount of excavation accomplished to date. As shown in the picture, taken on June 30, 1937, the water surface in the sump was 204 feet below the original river bed. Forebay excavation and construction of the trash rack structure (California side of the river) is seen in the upper center. The original river surface was approximately 30 feet below the forebay shelf, and the water mark is clearly shown on the canyon wall. The draglines in the bottom of the excavation, with their 80-foot booms, are dwarfed by the hole that they have dug. This excellent picture was taken by the official photographer of the Bureau of Reclamation at Parker Dam.

MONTHLY REPORT REVIEWS ACTIVITIES ALONG THE AQUEDUCT LINE

(EDITOR'S NOTE: The following is a brief summary of some of the activities of the District as set forth in the monthly report of General Manager F. E. Weymouth, filed with the Board of Directors in July, and covering the work done in June.)

Legal Division

The matter of legislation laying the foundation for revision of Boulder Dam power rates occupied the attention of the General Counsel during June. Congressional action is still pending.

Miscellaneous Activities Division

General information, together with detailed data on specific areas, was supplied during the month to representatives of a number of cities and areas that have expressed a desire to take the necessary steps that will make aqueduct water available to them. During the month of June, 301 employment applications were cleared through the District's Labor Office; of these 38 were made available for force account work, and 263 were made available for aqueduct contractors.

Field Engineering and Construction

Safety Engineering — See safety awards, Page 7.

Testing Laboratory — Approximately 64,880 barrels of cement were sampled and tested. A total of 595 concrete specimens were received from the field and tested. Work was completed on a large series of specimens to determine the effect of outdoor exposure on the strength of concrete containing different cements.

Operation of Utilities — During the period May 16 to June 15, 5,732,037 kw. hr. of power was used, 12,192 long distance telephone calls were handled, and 4,474,106 cubic feet of water was delivered.

Aqueduct Construction—See progress tables, Pages 4 and 5. Main-heading progress west from Cabazon adit totaled 806 feet for the best single heading progress since the San Jacinto tunnel was started. (See story, page 3.) The placing of invert concrete in the East Eagle tunnel was completed on June 26, completing the concrete lining of all contract tunnels on the main aqueduct.

Civil Engineering Division

Specifications—Four sets of specifications were issued during the month, and bids were opened on six sets of specifications, Nos. 208, 215, 217, 218, 219, and 221.

Design—Preparations were continued on designs and detail drawings to accompany Specifications No. 225 to be issued early in July for the upper 17.4 miles of the distribution western feeder. (See story, page 2.) Construction quantities were computed for the aqueduct structures appurtenant to the Iron Mountain pumping plant.

Materials—Orders were placed for 77 tons of billet steel concrete reinforcement bars, all of which were ordered for use on the distribution system. Cement shipments totaling 88,854 barrels were made to the field during the month.

Distribution Division

Office and Field Engineering—Location and right-of-way surveys and the drilling of hand-auger holes on the portion of the western feeder south of 98th Street were continued. Additional studies and estimates were started covering the location and design of the Upper Feeder extension westerly from the San Rafael tunnels to Santa Monica.

Field Construction—See progress tables, Pages 4 and 5. Placing of the concrete paving slab on the Cajalco Dike was completed on June 2, 1937.

Electrical Engineering Division

Office Engineering—Work was continued on the detail drawings for the installation of pumping plant equipment and on checking of manufacturers' drawings. Specifications were issued for delivery line headgates, and other equipment. Inspection of equipment under construction was continued at manufacturers' plants.

Field Construction—See progress tables, Pages 4 and 5. Seven miles of aluminum conductor was placed on the 230 kv transmission line, making a total of 228 miles of conductor in place.

Personnel Division

The net turnover for all divisions for May was 4.93 per cent. This is the lowest net turnover since January, 1935.

Purchasing Division

A total of 1,741 purchase orders were issued during the month, amounting to approximately $304,400. Carload forwardings totaled 386.

Accounting and Costkeeping Division

The total cost of the construction work accomplished to June 30 was $138,550,629.

NEWS FROM FIELD AND OFFICE

The regular temperature "box" has been moved out of this, its customary spot, and this picture inserted for the benefit of the Banning office gang. It is hoped that this cool scene will take their minds off the current thermometer readings. The February 10 issue of the NEWS, in which the picture was originally printed, listed a minimum temperature of 16 degrees for the Banning area.

SAFETY FLAG AWARDS

Tunnel Driving Operations:

Lawrence adit won the safety flag, having worked 40,920 man-hours with no lost-time accidents.

Tunnel Concreting Operations:

West Portal won this flag with 3,152 man-hours worked, and no lost-time accidents.

* * *

Congratulations are in order for Lawrence adit for the second consecutive month without a lost-time accident, and for also having won the tunnel-driving safety flag for the third consecutive month.

* * *

Paul Collier, long a member of the L. A. office of the Distribution, resigned from the District on July 22 to accept a position in the Geological Department of the Shell Oil Company in Los Angeles.

Aqueduct Temperatures
July 1 to July 15, 1937

	Max.	Min.
Div. 1	116°	67°
Div. 2	109°	77°
Div. 3	110°	76°
Div. 4	107°	76°
Divs. 5 and 6	108°	52°

J. B. Evans has been transferred as an Inspector to the Distribution Division from the Transmission Lines.

* * *

Inspector Wm. J. Barrette has been transferred from the Division 3 engineering staff to pumping plant inspection.

The L. A. office will be host this year for the annual employees' picnic, and plans are now simmering for the coming event. As usual, the committee is trying to entice the interest of all and sundry by having no definite plans, but by giving many interesting hints. Well, the system seems to work, viz., the Field followed the same plan last year and attracted more than 700 picnickers. This year's committee consists of Merrill Johnson, tennis and baseball; Lois Krauter, picnic games; Jimmy Swinford, golf; Winifred Guay, reception and lunch; and C. J. "Charlie" Brandt, chairman—by his own admission, he doesn't expect to do any work. No date has been selected, but the event will coincide with a Field shut-down. The location has thus far been narrowed down to one of the thirteen member cities of the District—the only remaining decision being—which one? More plans (maybe) will be published in following issues of the NEWS. (Ed. Note: The committee is hereby warned that, due to conditions in general, the cost of space in these columns is going up. Plan your budget accordingly.)

* * *

Dorothy Tregoning, who writes all the pay checks for Mr. Pontius, is having trouble with her left hand in typing these days because of the weight and brilliance of a new diamond engagement ring. The donor of all the carats (not the edible variety) is Snell Robertson of the Electrical Division. The center aisling will be done on October 23.

Another crew of feminine aqueduckers, this being the steno section of the L. A. office. Left to right are: Barbara Turner, Ida May "Jackie" Horner, Lillian "Pewee" Pallar, Fannie May Fink, and the head of the section, Orpha Bartz.

230 K. V. Line All Strung

On July 21 the Ziebarth crews completed the stringing of the last conductor of the 230 kv transmission line. With the exception of clean-up work, this transmission line is now completed and another big feature of the aqueduct is moved to the finished side of the record.

Designed to carry electric energy from Boulder Dam to the five aqueduct pumping plants, the line is 237 miles long and will carry electric energy at 230,000 volts.

Fritz Ziebarth, of Long Beach, was awarded the contract for the erection of the line on July 27, 1935, at a contract price of $448,787. Construction work was started on December 1, 1935, and has been carried on under the direction of Robert N. Allen, Transmission Engineer for the M.W.D.

One section of the line has already been put into use and has been carrying electricity since June 17, 1937. The 33 kv construction power line was hooked into the big line at a point near Iron Mountain, and the 230 K.V. line was energized from this connection up to Camino and down to Gene Wash to provide the Shea Company with a stand by line for their work in the vicinity of Parker Dam.

NEW OFFICERS TAKE POSTS

G. E. Farmer

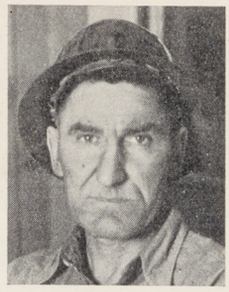
George Swanman

New officers were elected at the July 8 meeting of the L. A. Governing Board of the Employees Association. The new president is G. E. Farmer of the Electrical Division, Secretary-Treasurer is Merrill Johnson of Purchasing. Retiring officers were President George Swanman, Accounting, and Secretary-Treasurer C. G. Olson of the Auditing Division.

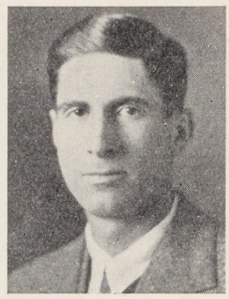
In addition to the usual business carried on by the employees' group, the association during the coming year has on its docket a number of other items of general interest to all District employees. Among these is a consideration of participation in a Credit Union.

Who's Who On the Aqueduct

D. A. Elliot



V. T. Davis



R. A. Skinner

D. A. ELLIOT
Architectural Designer, Electrical-Mechanical Division, M. W. D.

Born in Las Vegas, New Mexico, April 23, 1898 . . . Graduated from University of California at Berkeley in 1925. . . . 1925-1931, with Gilbert, Stanley and Underwood, Los Angeles architects, as assistant designer and later chief designer. During this period he designed Desmond's Wilshire Tower, the Ahwanee Hotel in Yosemite, North Rim Lodge at Grand Canyon, Zion Canyon Lodge, Bryce Canyon Lodge, new State Hospital at Norwalk, and Union Passenger Station at Omaha. Has been with M.W.D. since 1931. Designed Banning Headquarters Building, and preliminary designs on aqueduct pumping plants, also interior and exterior of Water Palace at San Diego Exposition.

V. T. DAVIS
General Foreman, Iron Mountain Pumping Plant, M. W. D.

Born in Osceola County, Michigan, August 14, 1889. . . . Attended Ferris Institute, Michigan, and University of Valparaiso. . . . Twenty-three years of heavy construction experience, particularly in concrete, heavy steel, and similar types of work. . . . 1912-1919, various types of construction work in vicinity of Detroit. . . . 1921-1924, U. S. Bureau of Reclamation, as general foreman on construction work. . . . 1924-1931, Construction Superintendent, Texas Power and Light Co., construction power and sub-stations. . . . With M.W.D. since February, 1935. . . . Married and has a daughter.

R. A. SKINNER
Designing Engineer, Distribution Division, M. W. D.

Born February 24, 1895, in New York City. . . . Attended Cornell University and U. S. Naval Academy, Annapolis. . . . 1921-1923, Chief Electrician, Standard Felt Co., Alhambra, Calif. . . . 1924-1933, Bureau of Engineering, City of Los Angeles, Junior Engineer, Assistant Engineer, and Supervising Engineer, storm drains, flood control, and special hydraulic structures. . . . With M.W.D. since March, 1933, hydraulic design distribution system. . . . Married and has two children.

Gunite yard at Bly siding for shooting gunite coating on outside of steel pipe being placed on Distribution Schedule 2S.